

**BEST AVAILABLE COPY**

USPTO Customer No. 25280

Case No: 5649

**REMARKS**

The Applicant hereby thanks the examining attorney for his kind assistance during the interview held on February 2, 2005. The claim changes are consistent with those that were discussed in the interview.

**Specification**

Specification changes discussed below are those made in the Amendment mailed February 17, 2005.

**Claims**

Claims 1-2 and 17 are pending. Claims 3-16 are cancelled without prejudice or disclaimer to the subject matter therein. New claim 17 is added.

**Rejections**

The disclosure was objected to in a prior action (dated January 11, 2005) because the structures at page 7 and 8 were obviously inadvertently switched in the process of final word processing of the patent document. This inadvertent error would be readily apparent to any person of skill in the art, and such person would immediately recognize this inadvertent reversal. A person reading the specification almost immediately would realize the true intent, and recognize this clerical error. The correction is made above to the specification, without adding any new matter. This is merely a clerical issue, and was corrected by amendment filed in February, 2005 by amendment to the specification.

**BEST AVAILABLE COPY**

USPTO Customer No. 25280

Case No: 5649

Further, the claims were objected to under section 112. The Office Action states that the term "lactone-based antioxidant" compound does not provide enablement for the claims.

The claims are amended above, and it is believed there are no further 112 issues. "Lactone based antioxidant" is clearly set forth in the specification at page 5, page 7, page 8 (first full paragraph), and in other portions of the specification. There is no requirement that all possible species be represented by way of example in the specification, and the specification fulfills all requirements of section 112, including the requirement that the specification enable a person of skill in the art to make and use the invention. It is requested that this section 112 rejection be withdrawn.

The Office Action further states a Section 112 issue with regard to disclosure of BHT derived compounds. This rejection is moot in view of the above amendment. Even so, the disclosure on pages 4-5 clearly provides details of such compounds, and their application in one particular embodiment (i.e. one aspect) of the practice of the invention.

**The Li Prior Art Reference Does Not  
Teach the Combination of the Invention**

The Office Action rejects the claims under section 102(e), based upon Li (United States Patent No. 6,679,754; hereafter "Li"). Li is directed to melt blends of polyolefins and polyetherester amides containing aromatic diol-derived sections with improved dyeability. Li teaches fabrics useful for woven garments, carpeting, furniture, and automotive upholstery, and the like.

# BEST AVAILABLE COPY

USPTO Customer No. 25280

Case No: 5649

Li teaches alloys or blends of olefin polymers. It lists hundreds of different co-additives that can be employed.

Li teaches using antioxidants.

Li teaches benzotriazoles.

Li teaches hindered amine stabilizers.

Li teaches sterically hindered amines.

Li teaches many, many different co-additives.

Li teaches hundreds of compounds, in a long list, and apparently included everything Li could think of to include, whether or not the combination or compounds recited actually had been enabled or appreciated for their ability to work.

Li does not teach the specific combination of this invention. Li does not teach the manufacture of foams. Li does not teach how polyurethane foams may be constructed. Li does not recognize the yellowing problem in foams — at all. Li does not solve the yellowing problem of foams. Li does not teach how one may or may not avoid yellowing of polyurethane foams. And further, as discussed below, Li does not appreciate the combination of compounds claimed in this invention.

## BEST AVAILABLE COPY

USPTO Customer No. 25280

Case No: 5649

The Examiner carries the burden of establishing anticipation. In *re Mullin*, 481 F.2d 1333, 1336 (CCPA 1973).

To establish anticipation, the prior art reference must itself make the selection that constitutes the invention. In the case of a combination of chemical compounds, the prior art must disclose the combination, to comprise an anticipation. For example, in *In re Arkley*, 455 F.2d 588 (CCPA 1972), the prior art generically disclosed the class of compounds that encompassed the claimed compound. The court found that the disclosure was not anticipatory, and reversed the finding of anticipation. The court stated that there was nothing in the prior art reference that clearly and unequivocally directed a person of skill in the art to make the particular selection of the claimed invention. In *re Arkley*, 455 F.2d at 588. Thus, the court reversed the novelty rejection.

Likewise, in this instance, the selection of the combination of three particular species, used in combination, is not suggested by Li. Li does not suggest a combination as claimed, and a person of skill in the art would not be motivated in any manner to make this particular selection, based upon a reading of Li alone. In this instance — the selection of these particular compounds — and the use of them in this specific combination — as effective in foams — is novel — and is not anticipated.

The invention is directed to solving problems of yellowing in foams. For example, yellowing of foam may be caused by (1) gas fade, (2) thermal discoloration, and (3) lightfastness problems. These three different problems have different chemical/additive solutions. However, one problem in solving the yellowing of foam is

## BEST AVAILABLE COPY

USPTO Customer No. 25280

Case No: 5649

that additives that solve or alleviate one of these yellowing mechanisms, adversely impact another mechanism. Thus, a solution that accommodates each of these various mechanisms, and provides a commercially satisfactory answer, has been absent in the industry.

In the invention, applicant has selected the following combination:

- 1) a benzotriazole, and
  - 2) a lactone-based antioxidant, and
  - 3) a secondary phenyl amine or hindered phenol,
- for reducing undesirable yellowing when applied in a foam.

This combination is not recognized in Li, and is not taught at all in the Li reference. Li does not anticipate the invention. Li has not selected this combination (or even suggested such a combination of additives), and Li does not recognize that this combination provides unexpectedly beneficial results when applied in a foam. It is well settled that a reference, to anticipate, must teach the claimed elements combined and arranged as in the invention, for anticipation to apply. No such teaching of this specific combination is provided by Li.

It is believed that the above claims patentably define over the prior art record and that the application is in complete condition for allowance. Should any issues remain after consideration of this Amendment, however, the Examiner is invited and encouraged to telephone the undersigned at his convenience.

**BEST AVAILABLE COPY**

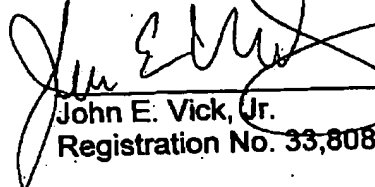
USPTO Customer No. 25280

Case No: 5649

**Fee Authorization:** In the event that there are additional fees associated with the submission of these papers, Applicant hereby authorizes the Commissioner to withdraw those fees from our Deposit Account No. 04-0500.

**Extension of Time:** In the event that additional time is required to have the papers submitted herewith for the above referenced application to be considered timely, Applicant hereby petitions for any additional time required to make these papers timely and authorization is hereby granted to withdraw any additional fees necessary for this additional time from our Deposit Account No. 04-0500.

Respectfully submitted,



John E. Vick, Jr.  
Registration No. 33,808

Legal Department  
MILLIKEN AND COMPANY  
920 Milliken Road, M-495  
Spartanburg, SC 29303  
Telephone (864) 503-1383  
Facsimile (864) 503-1999